

The same observers have analyzed the blood drawn in two cases of varioloid disease; in one the venesection was performed on the second day of the eruption, and in the other on the third day. In both these cases the fibrine was sensibly diminished, whilst the blood-corpuscles varied but little from their normal standard.

MM Andral and Gavarret state, that in rubeola the proportion of fibrine never exceeds its proper limits, nor does it fall much below them; and in most cases the blood-corpuscles are somewhat above their normal quantity. The venesections were performed on the first, second, and third days of the appearance of the eruption, except in two instances, in which the venesections were performed after the disappearance of the eruption.

They have also made four analyses of the blood drawn from three patients affected with scarlatina. In two of these bleedings the blood, on analysis, yielded a larger proportion than usual of both the fibrine and the blood-corpuscles. The venesections were performed in two instances on the second day of the eruption, and in one instance during convalescence.

Lecanu has made analyses of the blood in scarlatina, which corresponded in their results with the observations of Andral and Gavarret, and proving that the blood-corpuscles were in greater proportion than in the normal state, although the proportion of fibrine was not accurately ascertained.

Whilst many cases of exanthemata proceed on through their entire course without any severe complication attending them, and throughout assuming a favourable form or type in their progress towards a favourable termination, we meet with other cases which, either from their commencement or during their course, are accompanied with such serious complications, or assume so unfavourable a form or type, as that it appears probable that life must fall a victim to the disease, so much is it threatened by the prostration of the vital powers. In these severe cases of eruptive fevers, the blood has been observed to become thinner, and of less consistence, containing much less of fibrine; the opposite to that state of the blood which is observed in the phlegmasiæ, where the proportion of the fibrine is usually greater than natural. Such a deficiency in the proportion of the fibrine, whenever it occurs, involves considerable alterations in the physical characters of the blood. The serum of the blood appears small in quantity in proportion to the clot, and they are not so distinctly separated from each other as in healthy blood, or as in blood drawn in cases of phlegmasiæ. The clot, too, is large, and sometimes occupies the extent of the vessel into which it has been received; and besides, it is never cupped, as it commonly is in the phlegmasiæ, and its consistence is usually so slight, that it may be very easily torn or broken down on pressure.

Another important character of the blood, negative it is true, which has been observed in this class of diseases, is the absence of the buffy coat. M. Andral states that he has never found this present in rubeola, scarlatina, or variola, except in cases where there had been some well-marked inflammatory complication attending them. He adds, that in variola, when the eruption is very confluent, and especially when there are collections of pus existing beneath the integument, or in some organ, the buffy coat may be found on the surface of the clot; but this buffy coat, instead of being firm and tenacious, is very soft and gelatinous. If the necessary condition for the production or formation of the buffy coat be a certain excess of the fibrine in proportion to the blood-corpuscles, we can easily understand how it may be absent in blood drawn from patients affected with diseases in which the fibrine is almost never in excess, but is found either in its normal proportion, or diminished below that. Andral supposes that this diminution of the fibrine is owing to an influence or cause, of the nature of a poison, which, if it be only slight, must exert a certain effect on the blood, although it may not be appreciable; whereas, if this poisonous influence or cause act in a stronger degree, its effect on the composition of the blood then becomes evident, both in its physical and chemical characters — (*London Med. Gaz.*, Oct., 1846.)

32. *Microscopical characters of Cancer.*—M. SEDILLOT, in a communication read to the French Academy of Sciences, on the 14th Sept. last, sums up his researches on cancer in the following propositions:—

The characters assigned to cancer by pathology and pathological anatomy are insufficient, in many cases, to render the diagnosis certain. Lancinating pains, a mammillated aspect, hardness, electricity, softening, ulceration, affection of the contiguous tissues, general affection of the constitution, the results of anatomical examination, relapse after removal, are circumstances common to many tumours—epithelial, fibrinous, fatty, cystoid, and others less known.

The combined pathological and microscopical characters of tumours, supposed to be cancerous, leads M. Sedillot to range them in five classes:—

a. Tumours presenting all the pathological and microscopical characters of cancer.

b. Tumours presenting all the pathological characters of cancer, but evidently belonging to other genera, as proved by microscopical examination.

c. Tumours which do not present decided characters of cancer, though the microscope shows them to be cancerous.

d. Tumours whose pathological characters are those of cancer, and which are believed to be cancer, and respecting which the microscope neither confirms nor invalidates the opinion.

e. Tumours whose nature remains quite uncertain despite our pathological and microscopical knowledge.

In a microscopical point of view, cancer consists of a new element without any analogue in the economy, which possesses an independent life, and also distinct forms, whereby, in most cases, a certain diagnosis can be deduced. The dimensions of the cancerous cell may attain ten times the diameter of the globules of the blood. The cancerous cell originates in two distinct ways, sometimes it commences in an amorphous liquid (blastema) under the form of nuclei (cytoblasts), which become changed into nucleoli (small cells) and subsequently attain their complete development; sometimes it commences and undergoes the phases of its increase in a pre-existing cell (endogenous generation), in which are seen nuclei and nucleoli, which escape by dehiscence or by a breaking up from the mother cell when they come to maturity. The other elements, which are tolerably often found associated with cancer, are—cellular and fibrous tissue, fat, granular globules, melanosis, blood, pus, crystals of cholesterine, &c. Fusiform bodies or cells in course of fibrillous transformation are very common.

The appearance of cancer indicates an original (hereditary) or acquired constitutional predisposition, the existence of which may be suspected, but can never be demonstrated except by the appearance of the disease. Local irritations, causing permanent sanguineous congestions, injuries with fibrinous deposits, any morbid action developed in a particular point of the economy, may excite cancer in a predisposed individual. The cancerous diathesis or cachexia seems in some rare cases to invade the economy very rapidly, and to precede or at least accompany the local manifestation of one or of several cancers.

The treatment is palliative, curative, or preventive, according to the indications; palliative, if the cachexia is manifest, the cancer intense, multiple, or inaccessible; curative, in every case where the constitution is still sound, the cancer circumscribed, and susceptible of being completely removed. The prophylactic treatment consists in preventing and combating all the causes of the evolution of cancer in persons already operated on for cancer, and therefore liable to relapse.—*Dublin Med. Press*, Oct. 21, 1846.

33. *Case in which there was a black secretion from the skin of the forehead and upper part of the face.*—The tenth volume of the *Medico-Chirurgical Transactions*, (London, 1845,) contains an account by Wm. TEEVAN, Esq., of a very remarkable case of a lady, 15 years of age, who was afflicted with a singular discoloration of the forehead and upper part of the face. The discoloration was first observed about the middle of January, 1845, on the left under eyelid, near the internal angle of the eye; appearing at the commencement as a brownish spot, which in the course of four or five days assumed a jet black colour, and gradually extended to the entire forehead and eyelids of both eyes. The discoloration never appeared on any other part of the body, and on the forehead was accurately limited by the hair. The patient stated that on her attempting to wash the black matter off it caused her so much pain, owing to the sensitiveness of the skin, that she desisted,